

**AuroraTec™ ENV39-FR-7000**

Aurora Material Solutions, LLC - Polycarbonate + PBT

## General Information

**Product Description**

AuroraTec™ ENV39-FR-7000 is an unfilled, UV stabilized, flame retardant, black Polycarbonate / Polybutylene Terephthalate (PC/PBT) injection molding grade.

Formerly known as ENVIRON®.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Flame Retardant	• Mold Release	• UV Stabilizer
Features	• Flame Retardant	• Good Mold Release	• UV Stabilized
Uses	• Electrical/Electronic Applications	• Outdoor Applications	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E.192776		
Appearance	• Black		
Processing Method	• Injection Molding		

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	17	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	0.011 to 0.014	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	6900	psi	ASTM D638
Tensile Elongation (Break)	40	%	ASTM D638
Flexural Modulus	296000	psi	ASTM D790
Flexural Strength	11000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	13	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	180	°F	ASTM D648
RTI Elec			UL 746B
0.04 in	176	°F	
0.06 in	176	°F	
0.12 in	176	°F	
RTI Imp			UL 746B
0.04 in	176	°F	
0.06 in	176	°F	
0.12 in	176	°F	
RTI Str			UL 746B
0.04 in	176	°F	
0.06 in	176	°F	
0.12 in	176	°F	
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	• V-2		



0.12 in

- V-0
- V-0
- 5VA

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	480 to 500	°F
Middle Temperature	480 to 500	°F
Front Temperature	500 to 540	°F
Nozzle Temperature	480 to 520	°F
Mold Temperature	140 to 160	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 200	psi
Screw Speed	50 to 80	rpm

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

